

March 28, 2000

Carol Browner, Administrator  
US EPA  
PO Box 1473  
Merrifield, VA 22116

Attn: Chemical Right-to-Know Program – Test Plan Submission from HERTG  
Registration Number 1100967

Dear Ms. Browner:

The Chemical Manufacturers Association Petroleum Additives Panel (Panel) Health, Environmental, and Regulatory Task Group (HERTG) submits for review and public comment its test plan report, as well as related robust summaries, for the “*alkyl sulfide*” category of chemicals under the Environmental Protection Agency’s High Production Volume (HPV) Chemical Challenge Program. The HERTG understands that there will be a 120-day review period for the test plan report and that all comments generated by or provided to EPA will be forwarded to the HERTG for consideration.

The alkyl sulfides in this category, which are used as petroleum lubricant additives, are characterized by having structural similarities and limited reactivity, low biological activity, and very low water solubility. Based upon the data reviewed in the attached report, the HERTG concludes that the physicochemical and toxicological properties of the proposed alkyl sulfide category members are similar and follow a regular pattern similar to the structural similarity. Thus, HERTG believes these five chemicals meet the EPA definition of a chemical category and will test them in accordance with the test plan summarized in the attached report. The five chemicals in the alkyl sulfide category are as follows:

- 2-propanol, 1-(tert-dodecylthio)- (CAS # 67124-09-8, referred to in this report as propanol/dodecylthio derivative)
- 1-decene, sulfurized (CAS # 72162-15-3, referred to in this report as decene derivative)
- 1-propene, 2-methyl-, sulfurized (CAS # 68511-50-2, referred to in this report as methyl propene derivative)
- Pentene, 2,4,4-trimethyl-, sulfurized (CAS # 68515-88-8, referred to in this report as trimethyl pentane derivative)
- Alkenes, C15-18 alpha-, sulfurized, (CAS # 67762-55-4, referred to in this report as C15-C18 alkene derivative).

Briefly, the HERTG's test plan for the alkyl sulfide category includes the following tests and computer modeling:

- Fugacity modeling – propanol/dodecylthio derivative (CAS # 67124-09-8); decene derivative (CAS # 72162-15-3) (mono- and disulfide variants); methyl propene derivative (CAS # 68511-50-2) (lengths y=3 and y=8); trimethyl pentane derivative (CAS # 68515-88-8) (homologues y=1 and y=4); and, C15-C18 alkene derivative (CAS # 67762-55-4 (mono- and disulfide variants)
- Biodegradability study – decene derivative (CAS # 72162-15-3)
- Photodegradation modeling – propanol/dodecylthio derivative (CAS # 67124-09-8), methylpropene derivative (CAS # 68511-50-2) and C15 – C18 alkene derivative (CAS # 67762-55-4)
- Acute fish toxicity study - propanol/dodecylthio derivative (CAS # 67124-09-8)
- Acute invertebrate toxicity study - propanol/dodecylthio derivative (CAS # 67124-09-8)
- Acute alga toxicity study - propanol/dodecylthio derivative (CAS # 67124-09-8)
- Reproductive/developmental toxicity study - propanol/dodecylthio derivative (CAS # 67124-09-8).

As HERTG developed this test plan, HERTG considered carefully and tried to limit how many animals might be required for tests included in the proposed plan and conditions to which the animals might be exposed. As noted above, a minimal amount of animal testing is proposed and, for those tests, HERTG believes the currently available scientific evidence suggests no significant toxicity will be demonstrated. As a result, HERTG believes that the concerns of some non-governmental organizations about animal welfare have been fully considered and that use of animals in this proposed test plan has been minimized.

HERTG previously committed to submit test plans for several other chemicals in 2000. Rather than submit all the reports at this time, HERTG wishes to wait until all comments are received on the alkyl sulfide report, as HERTG recognizes that comments submitted in response to this test plan report may impact HERTG's consideration of other test plan reports. HERTG anticipates that the test plan reports for its other chemicals committed to for 2000 will be submitted in May or June 2000.

Included in this package is a computer diskette that contains electronic copies of the HERTG's test plan report and accompanying robust summaries.

Thank you in advance for your attention to this matter. If you have any questions regarding the test plan report or the robust summaries, or HERTG's activities associated with the Challenge Program, please contact Kathleen Roberts, HERTG Manager. She can be reached at 703-741-5613 (telephone), 703-741-6091 (telefax) or [Kathleen\\_Roberts@cmahq.com](mailto:Kathleen_Roberts@cmahq.com) (e-mail).

Sincerely,

Courtney M. Price  
Vice President  
CHEMSTAR

cc: HERTG members